



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SR

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/389,386 09/03/99 IZQUIERDO

P 225/48098

EXAMINER

QM32/0823

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P O BOX 14300
WASHINGTON DC 20044-4300

NGUYEN, T	
ART UNIT	PAPER NUMBER

3726

18

DATE MAILED:

08/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/389,386

Applicant(s)
Izquierdo et al.

Examiner
Trinh Nguyen

Art Unit
3726



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 22, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10, 11, 15, 16, 18, 20, 22 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 11, 15, 16, 18, 20, 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Art Unit: 3726

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 6/22/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/389,386 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Objections

2. Claim 10, 11 and 16 are objected to because of the following informalities: both claims 10 and 11 depend on a cancelled claim 7, and claim 16 depends on a cancelled claim 14. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15, 20, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, line 2: "the interiors" lacks proper antecedent basis.

Art Unit: 3726

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 10, 11, 15, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirt (US 4,625,465).

Kirt teaches a method for surface treatment of an interior of a hollow body such as an engine cylinder bore (10), wherein the method comprising the step of dry-cutting, i.e., honing, milling, drilling, brushing, knurling, and/or abrading, the interior of the hollow body (11) by using a tool (23, 36) to remove a surface material therein.

Regarding claims 10 and 11, note that Kirt's tool (23, 36) can be interpreted as an indexing insert wherein the tool is fitted with a plurality of indexing inserts (27, 37).

Regarding claim 22, note in Figures 2 and 4, note that Kirt's tool (23, 36) have undefined surface profiles which locate on either reference numbers 27 or 37.

Art Unit: 3726

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirt (US 4,625,465) in view of Palazzolo et al. (US 5,691,004).

Regarding claim 4, it is noted that Kirt's tool includes the use of stones (37) in the honing process. However, it does not specifically indicate that the stone used in the tool comprises cubic boron nitride, polycrystalline diamond, a coated or uncoated hard metal or a ceramic. Palazzolo et al., on the other hand, disclose that a honing tool can be comprised of any hard material such as boron nitride, coated or uncoated metal, or even diamond so as to roughen the inner surfaces of a cylinder bore (see lines 1-20 of col. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the use of boron nitride, coated or uncoated metal, and/or diamond in Kirt's tool, in a similar manner as taught in Palazzolo, in order to efficiently roughen the inner surfaces of an engine cylinder bore.

Regarding claims 16 and 18, Kirt teaches the claimed invention but lacks the teaching of thermally spraying a layer to the surface of the hollow body, i.e. engine cylinder bore, after dry-cutting. Note in the Abstract, Palazzolo et al. teach that after the honing/dry-cutting step the

Art Unit: 3726

interior surface of the hollow body is thermally sprayed with a coat in order to increase the wear resistance and the lubricity of the hollow body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have thermally sprayed a layer onto a surface of Kirt's hollow body, in a similar manner as taught in Palazzolo, for the purpose of increasing the wear resistance and lubricity thereof.

Response to Arguments

9. Applicant's arguments with respect to claims 1-4, 10, 11, 15, 16, 18, 20, and 22 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Nguyen whose telephone number is (703) 306-9082.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1148.

ttn

August 16, 2001


S. THOMAS HUGHES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700